IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of processing medical image data to determine a prognosis of recovery, comprising:

obtaining segmented image data of a portion of the medical image data corresponding to an abnormality;

extracting at least one abnormality feature from the segmented image data corresponding to the abnormality; and

determining the prognosis of recovery based on the extracted at least one abnormality feature, wherein the prognosis of recovery includes an indication of the likelihood of survival of a subject, wherein said determining step includes

applying the at least one abnormality feature to a classifier trained in relation to said at least one abnormality feature obtained from at least one set of previously obtained medical data including medical image data and a set of truth indicators, the set of truth indicators including at least one of lymph node involvement, presence of metastatic disease, and presence of local recurrence, wherein said classifier is trained by comparing at least one of said truth indicators to a numerical indication of prognosis output by said classifier.

2. (Previously Presented) The method of claim 1, further comprising:

obtaining segmented image data of a portion of the medical image data corresponding to a parenchymal region; and

extracting at least one parenchymal feature from the segmented image data corresponding to the parenchyma region,

wherein the determining step comprises determining the prognosis of recovery based additionally on the extracted at least one parenchymal feature.

3. (Original) The method of claim 2, wherein the step of extracting the at least one parenchyma feature comprises:

determining at least one of skewness, coarseness, and contrast of the segmented image data corresponding to the parenchymal region.

4. (Original) The method of claim 2, wherein the step of obtaining the segmented image data of the portion of the medical image data corresponding to the parenchymal region comprises:

obtaining mammographic image data corresponding to a region distinct from the abnormality.

5. (Original) The method of claim 1, wherein the step of obtaining the segmented image data corresponding to the abnormality comprises:

obtaining an indication of the location of the abnormality in the medical image data; and

performing region growing from the obtained location.

6. (Original) The method of claim 1, wherein the obtaining step comprises:

obtaining mammographic image data.

7. (Original) The method of claim 1, wherein the extracting step comprises:

determining a radial gradient index.

8. (Original) The method of claim 1, wherein the extracting step comprises:

determining at least one of circularity and density of the abnormality.

9. (Original) The method of claim 1, wherein the extracting step comprises:

determining at least one of average gray level, contrast, and a texture measure of the

abnormality.

10. (Original) The method of claim 1, wherein the extracting step comprises:

determining a spiculation measure.

11. (Original) The method of claim 10, wherein the step of determining the

spiculation measure comprises:

obtaining a cumulative edge gradient histogram of the segmented image data; and

determining the spiculation measure based on the obtained cumulative edge gradient

histogram.

12. (Original) The method of claim 1, wherein the determining step comprises:

applying the extracted at least one abnormality feature to an artificial neural network

(ANN) that classifies the abnormality at an output of the ANN.

13. (Original) The method of claim 1, wherein the determining step comprises:

applying the extracted at least one abnormality feature to a linear discriminant that

classifies the abnormality at an output of the linear discriminant.

14. (Canceled)

15. (Original) The method of claim 2, wherein the step of determining the prognosis

based on the extracted at least one parenchymal feature comprises:

applying the extracted at least one parenchymal feature to an artificial neural network

(ANN) that determines a numerical indication of the prognosis at an output of the ANN.

16. (Original) The method of claim 2, wherein the determining step comprises:

applying the extracted at least one parenchymal feature to a linear discriminant that

determines a numerical indication of the prognosis at an output of the linear discriminant.

17. (Currently Amended) A method of processing medical image data to determine a

prognosis of recovery, comprising:

obtaining segmented image data of a portion of the medical image data corresponding

to a parenchymal region;

extracting at least one parenchymal feature from the segmented image data

corresponding to the parenchymal region; and

determining the prognosis of recovery based on the extracted at least one parenchymal

feature, wherein the prognosis of recovery includes an indication of the likelihood of survival

of a subject, wherein said determining step includes

applying the at least one parenchymal feature to a classifier trained in relation to said

at least one parenchymal feature obtained from at least one set of previously obtained medical

data including medical image data and a set of truth indicators, the set of truth indicators

including at least one of lymph node involvement, presence of metastatic disease, and

presence of local recurrence, wherein said classifier is trained by comparing at least one of

said truth indicators to a numerical indication of prognosis output by said classifier.

18. (Previously Presented) A computer program product configured to store plural computer program instructions which, when executed by a computer, cause the computer to perform the steps recited in any one of claims 1-13 and 15-17.

19. (Previously Presented A system configured to process medical image data to determine a prognosis of recovery by performing the steps recited in any one of claims 1-13 and 15-17.